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CLAIMS

1. A method for inhibiting LCP associated complement activation, comprising contacting a mammalian cell having surface exposed MBL ligand with an effective amount
5 of an MBL inhibitor to inhibit LCP-associated complement activation.

2. The method of claim 1, wherein the MBL inhibitor is an isolated MBL binding peptide.

10 3. The method of claim 2, wherein the isolated MBL binding peptide has an MBL binding CDR3 region or functional variant thereof.

4. The method of claim 2, wherein the isolated MBL binding peptide is an antibody fragment.

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5. The method of claim 2, wherein the isolated MBL binding peptide is an antibody.

6. The method of claim 1, wherein the MBL inhibitor is an isolated MASP binding peptide.

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7. The method of claim 2, wherein the method is a screening assay.

8. The method of claim 1, wherein the MBL inhibitor is administered to a subject in an amount effective to inhibit LCP-associated complement activation.

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9. The method of claim 8, wherein the MBL inhibitor is an isolated MBL binding peptide.

10. The method of claim 9, wherein the isolated MBL binding peptide has an MBL
30 binding CDR3 region or functional variant thereof.

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11. The method of claim 9, wherein the isolated MBL binding peptide is an antibody fragment.

12. The method of claim 9, wherein the isolated MBL binding peptide is an antibody.

13. The method of claim 8, wherein the MBL inhibitor is an isolated MASP binding peptide.

10 14. The method of claim 8, wherein the cellular injury mediated by LCP associated complement activation contributes to tissue injury associated with atherosclerosis.

15 15. The method of claim 8, wherein the cellular injury mediated by LCP associated complement activation contributes to tissue injury associated with the pulmonary system.

16. The method of claim 15, wherein the MBL inhibitor is administered to the subject by an aerosol route of delivery.

17. The method of claim 8, wherein the cellular injury mediated by LCP associated complement activation contributes to tissue injury associated with a disorder selected from the group consisting of arthritis, myocardial infarction, ischemia, reperfusion, transplantation, CPB, stroke, ARDs, SLE, lupus, and dialysis.

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25 18. A composition, comprising an MBL inhibitor, wherein the MBL inhibitor is an isolated binding peptide that selectively binds to a human MBL epitope and that inhibits LCP associated complement activation.

19. The composition of claim 18, wherein the isolated MBL binding peptide has an MBL binding CDR3₁ region or a functional variant thereof of a monoclonal antibody produced by hybridoma cell line_(3F8) deposited under ATCC accession number HB-12621.

20. The composition of claim 18, wherein the isolated MBL binding peptide has an MBL binding CDR3₂ region or a functional variant thereof of a monoclonal antibody produced by hybridoma cell line_(2A9) deposited under ATCC accession number HB-12620.

5 21. The composition of claim 18, wherein the isolated MBL binding peptide has an MBL binding CDR3₁ region or a functional variant thereof of a monoclonal antibody produced by hybridoma cell line_(hMBL1.2) deposited under ATCC accession number HB-12619.

10 22. The composition of claim 18 wherein the isolated peptide is an intact soluble monoclonal antibody.

23. The composition of claim 18 wherein the isolated peptide is monoclonal antibody_(3F8) produced by the hybridoma cell line deposited under ATCC Accession No.
15 HB-12621.

24. The composition of claim 18 wherein the isolated peptide is monoclonal antibody_(2A9) produced by the hybridoma cell line deposited under ATCC Accession No. HB-12620.

20 25. The composition of claim 18 wherein the isolated peptide is monoclonal antibody_(hMBL1.2) produced by the hybridoma cell line deposited under ATCC Accession No. HB-12619.

25 26. The composition of claim 18 wherein the isolated peptide is a humanized monoclonal antibody.

27. The composition of claim 18 wherein the isolated peptide is a monoclonal antibody fragment selected from the group consisting of an F(ab')₂ fragment, an Fd
30 fragment, and an Fab fragment.

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28. The composition of claim 18 wherein the isolated peptide has a light chain CDR2 region selected from the group consisting of a CDR2_(3F8) of a monoclonal antibody produced by hybridoma_(3F8) deposited under ATCC Accession No. HB-12621, a CDR2_(2A9) of a monoclonal antibody produced by hybridoma_(2A9) deposited under ATCC Accession
5 No. HB-12620, and a CDR2_(hMBL1.2) of a monoclonal antibody produced by hybridoma_(hMBL1.2) deposited under ATCC Accession No. HB-12619.

29. The composition of claim 18 wherein the isolated peptide has a light chain CDR1 region selected from the group consisting of a CDR1_(3F8) of a monoclonal antibody produced by hybridoma_(3F8) deposited under ATCC Accession No. HB-12621, a CDR1_(2A9)
10 of a monoclonal antibody produced by hybridoma_(2A9) deposited under ATCC Accession No. HB-12620, and a CDR1_(hMBL1.2) of a monoclonal antibody_(hMBL1.2) produced by hybridoma hMBL1.2 deposited under ATCC Accession No. HB-12619.

30. A hybridoma cell line deposited under ATCC Accession No. HB-12621.

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31. A hybridoma cell line deposited under ATCC Accession No. HB-12620.

32. A hybridoma cell line deposited under ATCC Accession No. HB-12619.

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33. The composition of claim 18, wherein the composition is a pharmaceutical composition including an effective amount for treating an MBL mediated disorder of the isolated MBL binding peptide; and,
a pharmaceutically acceptable carrier.

25 34. The composition of claim 33, further comprising a drug for the treatment of an MBL mediated disorder.

35. A composition, comprising an MBL inhibitor, wherein the MBL inhibitor is an anti-MBL antibody that: (i) selectively binds to a human MBL epitope and (ii) prevents
30 LCP activation.

36. A method for screening of a cell for susceptibility to treatment with a MBL inhibitor comprising:

detecting the presence of a MBL on a surface of a mammalian cell, wherein the presence of the MBL indicates that the cell is susceptible to LCP associated complement activation and that the subject is susceptible to treatment with an MBL inhibitor.

37. The method of claim 36, wherein the mammalian cell is isolated from the subject.

38. The method of claim 36, wherein the mammalian cell is an endothelial cell.

39. The method of claim 36, wherein the method comprises the step of contacting the MBL with a detection reagent that selectively binds to the MBL to detect the presence of the MBL.

40. The method of claim 39, wherein the detection reagent is an isolated MBL binding protein.

41. The method of claim 39, wherein the detection reagent is a labeled isolated MBL binding peptide.